[TRANSLATION]

Notice of Preliminary Rejection

Mailing No.: 9-5-2006-074048678
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Applicant(s): Finisar Corporation
Attorney(s): Yong Bok KANG et al.
Application No.: 10-2006-7001640
Title of Invention: OPTICAL AND ELECTRICAL CHANNEL FEEDBACK IN OPTICAL TRANSCEIVER MODULE

This Notice on the above-identified application has been rendered based on the reason(s) presented below under the prescription of Article 63 of the Korean Patent Law. If you have any opinion on this Notice and/or need to amend the specification of this application, please submit your argument and/or amendment by said due date.

REASON(S)

1. Since the specification of this application is improperly drafted as indicated below, this application cannot be patented under Article 42(3) of the Korean Patent Law.

2. Since claims 8 to 10, 16 and 18 are improperly drafted as indicated below, this application cannot be patented under Article 42(4)ii of the Korean Patent Law.

3. Since the invention recited in claims 1 to 21 can easily be invented by a person with ordinary skill in the art to which the present invention pertains prior to the filing of this application as indicated below, this application cannot be patented under Article 29(2) of the Korean Patent Law.

REMARKS

1-1. In line 8 of <3> and line 1 of <36> of the Korean specification, it is understood that 'transmitter' was mistyped as 'transceiver,' and it is unclear what

'RT' described after line 6 of <54> of the Korean specification means. (Article 42(3) of the Korean Patent Law)

2-1. It is unclear what 'RT' recited in lines 2, 4, 7 and 8 of claim 8 (Korean specification) means. (Article 42(4)ii of the Korean Patent Law)

It is unclear what 'RT' recited in lines 3 and 4 of claim 9 (Korean specification) means. (Article 42(4)ii of the Korean Patent Law)

It is understood what 'place' recited in line 8 of claim 10 (Korean specification) should preferably read 'work.' (Article 42(4)ii of the Korean Patent Law)

It is understood that 'loopback path' recited in line 2 of claim 16 (Korean specification) was mistyped as 'loopback.' (Article 42(4)ii of the Korean Patent Law)

It is understood what 'optical data device' recited in line 1 of claim 18 (Korean specification) should preferably read 'optical device.' (Article 42(4)ii of the Korean Patent Law)

3-1. Claims 8 and 9 were reviewed excluding 'RT' indicated above. Hereinafter, 'the person having ordinary skill in the art to which the present invention pertains' will be designated as 'skilled person.'

A transceiver comprising an input port in communication with an optical transmitter, an output port in communication with an optical receiver, and a loopback path, as recited in claim 1, is regarded as being easily derived from simple modification in design of combination the cited reference 1 (US Patent No. 05557437) and the cited reference 2 (US Publication No. 2002/0021468), wherein the cited reference 1 discloses an optical terminal system (see abstract, column 1, line 50~column 2, line 24, claims 1~11, and FIG. 1) which includes a receiving device, a transmitting device, and a loopback section, and the cited reference 2 discloses a semiconductor integrated circuit (see abstract, [38]~[44], claims 1~7, FIGs. 2 and 3) which includes a receiving circuit unit, a transmitting circuit unit, and a loopback path. Also, considering that objects and advantages of the present invention according to the above constitution can be predicted sufficiently from the cited references 1 and 2, it is not regarded that there exist

difficulty in constituting the transceiver of claim 1 from the cited references 1 and 2, particularity of the objects, and remarkable advantages that cannot be predicted by the skilled person. Therefore, claim 1 is regarded as being easily invented from the cited references 1 and 2 by the skilled person.

Claim 2 recites that the transceiver of claim 1 further comprises an integrated chip comprising a post amplifier and a laser driver, and the loopback path comprises a conductive path on the integrated chip. Claim 2 is regarded as being simply modified from an amplifier and a laser diode driver (see FIGs. 2 and 3) disclosed in the cited reference 1. Therefore, claim 2 is regarded as being easily invented from the cited references 1 and 2 by the skilled person.

Claim 3 recites the loopback path of claim 2 and is regarded as being simply modified from the loopback section disclosed in the cited reference 1 and the loopback path disclosed in the cited reference 2. Therefore, claim 3 is regarded as being easily invented from the cited references 1 and 2 by the skilled person.

Claim 4 recites the loopback path of claim 2 and is regarded as being simply modified from the loopback section disclosed in the cited reference 1 and the loopback path disclosed in the cited reference 2. Therefore, claim 4 is regarded as being easily invented from the cited references 1 and 2 by the skilled person.

Claim 5 recites that the integrated chip of claim 2 further comprises a receiver eye opener and a transmitter eye opener, and is regarded as being simply modified from a constitutional element of the optical terminal system disclosed in the cited reference 1 and a transceiver IC (particularly, clock and data recovery unit) disclosed in the cited reference 2. Therefore, claim 5 is regarded as being easily invented from the cited references 1 and 2 by the skilled person.

Claim 6 recites the loopback path of claim 5 and is regarded as being simply modified from the loopback section disclosed in the cited reference 1 and the loopback path disclosed in the cited reference 2. Therefore, claim 6 is regarded as being easily invented from the cited references 1 and 2 by the skilled person.

Claim 7 recites the loopback path of claim 5 and is regarded as being simply modified from the loopback section disclosed in the cited reference 1 and the loopback path disclosed in the cited reference 2. Therefore, claim 7 is regarded as

being easily invented from the cited references 1 and 2 by the skilled person.

Claim 8 recites the receiver eye opener, the transmitter eye opener, and the loopback path of claim 5, and is regarded as being simply modified from the optical terminal system (see FIG. 1) disclosed in the cited reference 1 and the transceiver IC (see FIGs. 2 and 3) disclosed in the cited reference 2. Therefore, claim 8 is regarded as being easily invented from the cited references 1 and 2 by the skilled person.

Claim 9 recites selective transmission of the receiver eye opener and the transmitter eye opener of claim 8, and is regarded as being simply modified from the optical terminal system (see abstract, column 1, line 50~column 2, line 24, claims 1~11, and FIG. 1) disclosed in the cited reference 1 and the transceiver IC (see abstract, [38]~[44], claims 1~7, FIGs. 2 and 3) disclosed in the cited reference 2. Therefore, claim 9 is regarded as being easily invented from the cited references 1 and 2 by the skilled person.

Claim 10 recites an operation mode of the transceiver of claim 1, and is regarded as being easily derived from the optical terminal system (see abstract, column 1, line 50~column 2, line 24, claims 1~11, and FIG. 1) disclosed in the cited reference 1 and the transceiver IC (see abstract, [38]~[44], claims 1~7, FIGs. 2 and 3) disclosed in the cited reference 2. Therefore, claim 10 is regarded as being easily invented from the cited references 1 and 2 by the skilled person.

Claim 11 recites the loopback path of claim 1, and is regarded as being easily derived from the optical terminal system (see abstract, column 1, line 50~column 2, line 24, claims 1~11, and FIG. 1) disclosed in the cited reference 1 and the transceiver IC (see abstract, [38]~[44], claims 1~7, FIGs. 2 and 3) disclosed in the cited reference 2. Therefore, claim 11 is regarded as being easily invented from the cited references 1 and 2 by the skilled person.

Claim 12 recites a transceiver comprising an optical transmitter, an optical receiver, and a loopback path, and is regarded as being simply modified from combination of the cited reference 1 and the cited reference 2, wherein the cited reference 1 discloses an optical terminal system (see abstract, column 1, line 50~column 2, line 24, claims 1~11, and FIG. 1) which includes a receiving device, a transmitting device, and a loopback section, and the cited reference 2 discloses

a semiconductor integrated circuit (see abstract, [38]~[44], claims 1~7, FIGs. 2 and 3) which includes a receiving circuit unit, a transmitting circuit unit, and a loopback path.

Claim 13 recites the loopback path of claim 12 and is regarded as being simply modified from the loopback section disclosed in the cited reference 1 and the loopback path disclosed in the cited reference 2. Therefore, claim 13 is regarded as being easily invented from the cited references 1 and 2 by the skilled person.

Claim 14 recites the loopback path of claim 12 and is regarded as being simply modified from the loopback section disclosed in the cited reference 1 and the loopback path disclosed in the cited reference 2. Therefore, claim 14 is regarded as being easily invented from the cited references 1 and 2 by the skilled person.

Claim 15 recites that the transceiver of claim 12 further comprises an integrated chip comprising a post amplifier and a laser driver, and the loopback path comprises a conductive path on the integrated chip. Claim 15 is regarded as being simply modified from an amplifier and a laser diode driver (see FIGs. 2 and 3) disclosed in the cited reference 1. Therefore, claim 15 is regarded as being easily invented from the cited references 1 and 2 by the skilled person.

Claim 16 recites the loopback path of claim 15 and is regarded as being simply modified from the loopback section disclosed in the cited reference 1 and the loopback path disclosed in the cited reference 2. Therefore, claim 16 is regarded as being easily invented from the cited references 1 and 2 by the skilled person.

Claim 17 recites that the integrated chip of claim 15 further comprises a receiver eye opener and a transmitter eye opener, and is regarded as being simply modified from a constitutional element of the optical terminal system disclosed in the cited reference 1 and the transceiver IC (particularly, clock and data recovery unit) disclosed in the cited reference 2. Therefore, claim 17 is regarded as being easily invented from the cited references 1 and 2 by the skilled person.

Claim 18 recites a method for remotely diagnosing the operation of devices in an optical network, which comprises functional steps corresponding to means included in the optical terminal system (see abstract, column 1, line 50~column 2, line 24, claims 1~11, and FIG. 1) disclosed in the cited reference 1 and the

semiconductor integrated circuit (see abstract, [38]~[44], claims 1~7, FIGs. 2 and 3) disclosed in the cited reference 2. Since the skilled person can easily substitute the steps for the means known by the cited references 1 and 2, claim 18 is regarded as being easily invented from the cited references 1 and 2.

Claim 19 recites the signal path of claim 18 and is regarded as being easily derived from the optical terminal system (see abstract, column 1, line 50~column 2, line 24, claims 1~11, and FIG. 1) disclosed in the cited reference 1 and the transceiver IC (see abstract, [38]~[44], claims 1~7, FIGs. 2 and 3) disclosed in the cited reference 2. Therefore, claim 19 is regarded as being easily invented from the cited references 1 and 2 by the skilled person.

Claim 20 recites the optical device of claim 18 and is regarded as being simply modified from the optical terminal system (see abstract, column 1, line 50~column 2, line 24, claims 1~11, and FIG. 1) disclosed in the cited reference 1 and the transceiver IC (see abstract, [38]~[44], claims 1~7, FIGs. 2 and 3) disclosed in the cited reference 2. Therefore, claim 20 is regarded as being easily invented from the cited references 1 and 2 by the skilled person.

Claim 21 recites the optical device of claim 18 and is regarded as being simply modified from the optical terminal system (see abstract, column 1, line 50~column 2, line 24, claims 1~11, and FIG. 1) disclosed in the cited reference 1 and the transceiver IC (see abstract, [38]~[44], claims 1~7, FIGs. 2 and 3) disclosed in the cited reference 2. Therefore, claim 21 is regarded as being easily invented from the cited references 1 and 2 by the skilled person.

[For reference]
The title of the invention should be stated to correspond to the claimed invention of claims. For example, 'A transceiver for optical and electrical channel feedback and a method for remotely diagnosing the operation of devices in an optical network' is preferably recommended.

Industrial applicability [69] of this application is preferably stated referring to the description of [63] to [68].

It is required that a priority document of this application be submitted.

[Attachments]
Attachment 1: A copy of US Patent No. 05557437 (September 17, 1996)
Attachment 2: A copy of US Publication No. 2002/0021468 (February 21, 2002)

December 12, 2006

Korean Intellectual Property Office
Examiner: LEE, Bohyung